



Using the Evidence Base to Promote Healthy Aging



“With our Evidence-Based Prevention Program, we are taking health promotion and disease prevention to a new level and positioning the network as a nationwide vehicle for translating research into practice.”

Josefina Carbonell, October 18, 2004

Introduction

With this issue brief, the Center for Healthy Aging at the National Council on Aging introduced a new publication series that provides information and resources to facilitate implementation of evidence-based health promotion and disease prevention programs by community-based organizations serving older adults. Current national initiatives encourage the adoption of evidence-based programs—funders increasingly demand that programming be based on solid evidence, agency leaders want to concentrate limited resources on proven programs, and older adults themselves are looking for programs that have been proven to work. This series is designed to assist agency leaders to reach and serve older adults more effectively and efficiently by sharing the best available information. This first issue brief provided the basics of evidence-based health promotion programming. In the Spring of 2006, it was revised to reflect the addition of evidence-based programs that are ready for national dissemination across the aging network.

Why consider evidence-based health promotion for older adults?

Community service providers may find it difficult to *prove* that their health promotion programs are efficient or effective, or make tangible, positive differences in the lives of their clients. They may find it relatively straightforward to report survey results, offer anecdotes about participant satisfaction, and document impressive enrollment numbers. They also may be tempted to fall back on experience and say, “Trust me, I’ve been working with my population for years and I can tell what’s working.” These efforts, however, do not respond to the following questions at the heart of the issue:

- Does the program truly benefit the targeted population?
- Can the provider be sure that the program does not cause harm or waste limited resources?
- How can providers who use untested or unproven approaches or evaluation measures determine the causes of an unsuccessful program? How do they pinpoint the problem for themselves and their funders? For example, was it the wrong type of intervention, did it target a population that did not need or could not benefit from the intervention, or did it use the wrong measures to evaluate the program?

To answer these questions, aging services providers need to learn how to recognize and specify community-level health risks and conditions, select interventions or models that directly address those risks, and design programs that appeal to the people most likely to benefit. The purpose of evidence-based health promotion is to take effective interventions built on research findings and apply them to improve the health and well-being of individuals, groups, or communities. Providers need this kind of information—first what has been shown to work, then how to implement what works within their community context, and finally how to evaluate the program—to provide quality services to their clientele, use program resources wisely, and sustain effective programs.

Advantages of an evidence-based approach

- Increases likelihood of successful outcomes when agencies move away from decision-making that relies too heavily on
 - History
 - Anecdotes
 - Pressure from policy makers
- Enhances the ability to use common health indicators and match health programs to those needs
- Makes it easier to defend or expand an existing program
- Increases effective use of resources
- Provides hard data to advocate for new programs
- Generates new knowledge about “what works” and “how to do it” that can help others

(Adapted from *Module 1: Introduction to evidence-based health*, The Community Guide, www.thecommunityguide.org/Training%20Resources/default.htm)

What is evidence-based health promotion?

Evidence-based health promotion is a process of planning, implementing, and evaluating programs adapted from *tested models or interventions* in order to address health issues in an ecological context. It takes an *epidemiologic perspective* that focuses on populations rather than individuals and emphasizes both prevention and treatment. The *ecological approach* looks at people, families and social networks, communities, systems of services, social and cultural norms, laws and political processes, the built and natural environments, and the interactions and reciprocal influences among them.

Initiatives to increase physical activity, such as the *EnhanceFitness* program, provide good illustrations of the multi-level ecological approach. These programs teach safe exercises to individuals, identify and address personal and community barriers to physical activity, and develop social support systems that help people become and stay physically active.

The term *health promotion* refers to both individuals and communities. At the individual level, successful health promotion helps people gain the skills to maintain and improve their health by adopting beneficial health behaviors, drawing on social supports, and learning to change or cope with their environments. At the community level, health promotion encourages communities to improve those environments through increased access to health care, adequate housing and transportation, safe neighborhoods and public areas, enjoyable places for recreation, and public policies and laws that promote healthy, safe lifestyles. Thus, health promotion focuses not only on individuals' healthy lifestyles but also on the overall physical, mental, and social well-being of communities (World Health Organization, www.who.int/healthpromotion/conferences/previous/ottawa/en).

The term *evidence* refers to a body of facts or information that evaluates the validity ("truth") of beliefs or assertions—for instance, beliefs about health risks for older adults in a community or assertions about the value of particular health-related activity programs. Evidence is the proof or factual basis. The term *evidence base* encompasses several components: the results of a systematic identification and review of the relevant body of information about a well-defined question, the methods and detailed procedures for addressing that question, the measurement of outcomes, and a description of the characteristics and environment of a target population affected by the question. The purpose of an evidence base is to provide knowledge of effective content and methods for translation into programs that service providers can apply to improve the health of individuals and groups.

In the context of health promotion programs, experts talk about three types of evidence (Brownson, Baker, Leet, & Gillespie, 2003; Rychetnik, Hawe, Waters, Barratt, & Frommer, 2004):

1. evidence about the health issue that supports the statement, "*Something* should be done;"
2. evidence about a tested program intervention or model that has been shown to address the health issue that supports the statement, "*This* should be done;" and

3. evidence about the design, context and attractiveness of the program to participants and other community stakeholders that supports the statement, "*How* this should be done."

The concept of evidence, then, applies not only to confirming that a specific health risk or condition exists in the community but also to matching a tested intervention or model with the condition and specifying how to tailor a program to work for the target population.

What are the tasks and steps for evidence-based health promotion?

Evidence-based health promotion includes the tasks and steps listed in the table on the following page (Brownson et al., 2003; Kahan & Goodstadt, 2001). Ideally, the program developed through these steps will include multiple interventions at different ecological levels. For example, when promoting physical activity, they might include undertaking an awareness campaign about the benefits of physical activity, increasing access to proven physical activity programming, and building more walking trails. Based upon a review of the evidence, each of these interventions has been recommended by the CDC's Task Force on Community Preventive Services (www.thecommunityguide.org/pa/default.htm).

In order to translate the intervention from its original application under controlled "laboratory-like" settings with tightly monitored protocols, providers need to understand the *core elements* of the intervention that made it work. These immutable core elements differ from *key characteristics*, which are more adaptable. For example, core elements of an evidence-based physical activity program might include setting goals, identifying barriers, and monitoring behavior change; key characteristics concern adapting the size of font or language level of materials to "fit" the population being served (Washington State Department of Health, 2004). This process of faithfully and accurately adhering to the core elements of an intervention is called *fidelity*. Fidelity, or the preservation of the evidence base, is central to evidence-based health promotion.

Effective programming requires not only an evidence base for the program, but also *evidence-based evaluation*. This evaluation occurs at two levels by measuring both implementation (process evaluation) and effects (outcomes evaluation). Outcomes evaluation may take place at both individual and communi-

ty levels to assess the changes in program participants' learning, health behaviors, and health status, as well as the effects of the program on community health status. *Sustainability*, like evaluation, concerns both individual and program levels—planning for lasting effects that help individuals maintain the positive changes in their health behaviors and health status, while also planning to institutionalize the program.

Broad-based collaboration with other organizations

will increase the ability of community-based agencies to design and implement evidence-based programs that promote and sustain long-term behavior change with the targeted older adult populations. Ultimately, these partnerships will enhance the community's ability to address the multi-dimensional, interdisciplinary nature of health promotion—the promotion of enduring healthy lifestyles and the holistic well-being of its older adults (Center for Healthy Aging, 2004).

Evidence-Based Health Promotion in Practice

TASKS	STEPS
Identify an important health issue and the population at risk	<ol style="list-style-type: none"> 1. Review epidemiological and other data to identify key health/functional conditions and risk factors for older adults in the community. 2. Specify the characteristics and contexts of the population at risk and of the broader community (e.g., income, education, culture, geographic location, accessibility to services).
Identify effective intervention(s)	<ol style="list-style-type: none"> 3. Systematically identify and review relevant research and information on proven interventions or models that address the targeted conditions or risk factors.
Establish broad-based partnerships	<ol style="list-style-type: none"> 4. Recruit community partners to help interpret data on health conditions and risk factors, select among available interventions, and establish priorities. 5. Articulate methods and detailed procedures for addressing identified health issues through planned actions that include the involvement of relevant community stakeholders.
Select an intervention	<ol style="list-style-type: none"> 6. Select a proven evidence-based intervention or model (from those in #3) that will be appropriate for the target community, suitable for adoption by providers, and feasible given available provider and community resources.
Translate the intervention into a program	<ol style="list-style-type: none"> 7. Translate the tested intervention or model into a program suitable for implementation in the community while maintaining fidelity (i.e., the faithful and accurate reproduction of the intervention's core elements in the design and implementation of the translated program). 8. Recruit and retain high risk, older adults from the target population who can benefit from the intervention. 9. Implement the translated program, maintaining fidelity to the core elements and design established in Step 7 while adapting key characteristics of the program (e.g., outreach methods, language level, and location of program) to the needs and characteristics of the target population.
Evaluate the program	<ol style="list-style-type: none"> 10. Plan goals for process and outcomes evaluation, design instruments and protocols for data collections, and assign responsibilities for evaluation. 11. Provide midcourse feedback on program operations and implementation and decide what adjustments (if any) need to be made. 12. Measure and evaluate program delivery and outcomes to assess the effectiveness of the program or model and inform the next cycle of program planning.
Sustain the program	<ol style="list-style-type: none"> 13. Determine the information, activities, and resources that maintenance of successful individual and program outcomes will require. Ask the following questions: <ul style="list-style-type: none"> • What long-term effects do we desire for program participants? • How can we support these effects programmatically? • What resources and partnerships will we need to maintain desired individual level outcomes and institutionalize the program?

Although the table lists the tasks sequentially, providers in the real world find that the process does not always strictly follow this progression. For example, recruitment of new community program partners may occur prior to assessing community health risks, or partners may emerge during program implementation. The list provides a guide to the basic components of evidence-based health promotion, not a strict set of steps.

How does an aging services agency know it is ready to implement an evidence-based health promotion program?

Fortunately, resources are available to help assess readiness to begin the evidence-based health promotion journey. The Center for Healthy Aging offers an assessment resource called the Readiness Checklist (www.healthyagingprograms.org/content.asp?sectionid=15&ElementID=9). Other tools to help you plan and manage evidence-based programming can be found at www.healthyagingprograms.org/content.asp?sectionid=74&ElementID=344.

Are there models in the field of aging services for evidence-based health promotion?

Happily, the answer is yes! Based upon our experience, there are several programs that have a strong science base and a successful track record of implementation in community organizations serving older adults. These programs are listed below with Web sites for more information. You can also visit the following link for brief program descriptions, publications, and contact information: www.healthyagingprograms.org/content.asp?sectionid=118&ElementID=342

Chronic Disease Self-Management Program

patienteducation.stanford.edu/programs/cdsmp.html

EnhanceWellness

www.projectenhance.org/pro/wellness.html

EnhanceFitness

www.projectenhance.org/pro/fitness.html

Active Choices

hprc.stanford.edu/pages/store/itemDetail.asp?118

Strong for Life

www.bu.edu/hdr/products/stronglife/items.html

A Matter of Balance

www.bu.edu/hdr/products/balance/index.html

www.mainehealth.org/mh_body.cfm?id=432

Healthy IDEAS or PEARLS

www.shelteringarms.org/index.cfm/CFID/28004092/CFTOKEN/96693372/MenuItemID/278.htm

www.cdc.gov/prc/tested-interventions/effective-interventions/program-encourage-active-rewarding-lives-seniors-depression-management.htm

www.ci.seattle.wa.us/humanservices/aging/Staff-Peers/Pearls.htm

Prevention & Management of Alcohol Problems in Older Adults: A Brief Intervention

www.healthyagingprograms.org/content.asp?sectionid=71&ElementID=338

preventionpathways.samhsa.gov/res_videos.htm

There are a number of other good health promotion programs. We encourage you to look at these as well. Some may not have the strong science base that those above do, and others do not yet have findings from replication experience with community organizations. Still, these programs may work for you. A list of all the programs with which we have some familiarity is available on the Center for Healthy Aging Web site (www.healthyagingprograms.org/content.asp?sectionid=118&ElementID=343).

Many of the programs listed above and on our Web site have participated in one (or more) of three national efforts targeting evidence-based health promotion for older adults. The Administration on Aging, together with national and local foundations, currently supports demonstration projects that are implementing evidence-based interventions in disease self-management, fall prevention, nutrition, physical activity, and medication management. Each project involves a partnership among local aging service providers, area agencies on aging, health care entities, and research organizations. A general overview of these programs is available on our Web site, www.healthyagingprograms.org/content.asp?sectionid=32.

NCOA, with the funding support of the John A. Hartford Foundation, coordinated the development and implementation of four evidence-based health promotion programs with ready-to-implement toolkits (www.healthyagingprograms.org/content.asp?sectionid=30).

The *Active for Life* program, with support from the Robert Wood Johnson Foundation, is testing the effectiveness, reach, and sustainability of two specific research-based physical activity/lifestyle modification programs: Active Choices and Active Living Every Day (www.activeforlife.info/about_the_program/program_information.html).

To help you get started, we have provided you with a list of useful resources on the following page.

References

Brownson, R. C., Baker, E. A., Leet, T. L., & Gillespie, K. N. (2003). Evidence-based public health. New York: Oxford University Press.

Centers for Disease Control and Prevention. (2001). Increasing physical activity: A report on recommendations of the Task Force on Community Preventive Services.

www.thecommunityguide.org/pa/default.htm

Center for Healthy Aging. (2004). Partnering to Promote Healthy Aging: Creative Best Practice Community Partnerships. www.healthyagingprograms.org/content.asp?sectionid=86&ElementID=160

Kahan, B., & Goodstadt, M. (2001). The interactive domain model of best practices in health promotion: Developing and implementing a best practices approach to health promotion. *Health Promotion Practice*, 2(1), 43-67.

Rychetnik, L., Hawe, P., Waters, E., Barratt, A., & Frommer, M. (2004). A glossary for evidence based public health. *Journal of Epidemiology & Community Health*, 58(7), 538-545.

Washington State Department of Health. (2004). Effective HIV interventions and strategies. www.doh.wa.gov/cfb/hiv_aids/Prev_Edu/Effective_Interventions/Eff_Int_Doc.pdf

World Health Organization. (1986). www.who.int/healthpromotion/conferences/previous/ottawa/en

Suggested Web Sites

Center for Healthy Aging
www.healthyagingprograms.org

Cochrane Collaboration
www.cochrane.org

Healthy People 2010 Information Access Project
phpartners.org/hp

RE-AIM.org
www.re-aim.org

The Community Toolbox
ctb.ku.edu

The Guide to Preventive Community Services
www.thecommunityguide.org

Victorian Government Health Information
www.health.vic.gov.au/healthpromotion

Useful Resources for Implementing an Evidence-Based Health Promotion Program

The resources below can be found at:

www.healthyagingprograms.org/content.asp?sectionid=119

GETTING STARTED

GENERAL EVIDENCE-BASED HEALTH PROMOTION PROGRAMMING INFORMATION

Using the Evidence Base to Promote Healthy Aging—Issue Brief 1

www.healthyagingprograms.org/content.asp?sectionid=15&ElementID=97

A New Vision of Aging: Helping Older Adults Make Healthier Choices

www.healthyagingprograms.org/content.asp?sectionid=75&ElementID=304

AOA Evidence-Based Disease Prevention Grants Programs

www.healthyagingprograms.org/content.asp?sectionid=32

Administration on Aging

www.aoa.gov/prof/evidence/evidence.asp

Centers for Disease Control and Prevention
www.cdc.gov/aging/index.htm

Agency for Healthcare Research and Quality
www.abrq.gov/news/ulp/diselder/ulpdiseid.htm

CDC's Healthy Aging Research Network
depts.washington.edu/harn

IMPLEMENTATION

Self-Assessing Readiness for Implementing Evidence-Based Health Promotion and Self-Management Programs—"The Readiness Tool"

www.healthyagingprograms.org/content.asp?sectionid=15&ElementID=9

From Their Study to Your Demonstration: Tracking Similarities and Differences in Evidence-Based Program Implementation—"Tracking Changes Tool"

www.healthyagingprograms.org/content.asp?sectionid=66&ElementID=336

Cultural Competence in Health Care: Is It Important for People With Chronic Conditions?

www.healthyagingprograms.org/content.asp?sectionid=68&ElementID=145

Maintaining Program Fidelity—"The Fidelity Tool"

www.healthyagingprograms.org/content.asp?sectionid=66&ElementID=340

Is Sustainability Possible?

www.healthyagingprograms.org/content.asp?sectionid=66&ElementID=297

PARTNERING

The Aging States Project: Promoting Opportunities for Collaboration Between the Public Health and Aging Services Networks

www.healthyagingprograms.org/content.asp?sectionid=86&ElementID=151

Partnering to Promote Healthy Aging: Creative Best Practice Community Partnerships

www.healthyagingprograms.org/content.asp?sectionid=86&ElementID=160

MD Link: Partnering Physicians With Community Organizations

www.healthyagingprograms.org/content.asp?sectionid=86&ElementID=223

PLANNING FRAMEWORKS

Chronic Care Model

www.improvingchroniccare.org/change/index.html

RE-AIM

www.re-aim.org

HEALTH TOPIC-SPECIFIC TOOLS

CHRONIC DISEASE SELF-MANAGEMENT

NCOA's Center for Healthy Aging—Chronic Disease Home Page

www.healthyagingprograms.org/content.asp?sectionid=68

Challenges and Successes in Implementing the Chronic Disease Self-Management Program

www.healthyagingprograms.org/content.asp?sectionid=68&ElementID=203

PHYSICAL ACTIVITY

NCOA's Center for Healthy Aging—Physical Activity Home Page

www.healthyagingprograms.org/content.asp?sectionid=73

Designing Safe and Effective Physical Activity Programs

www.healthyagingprograms.org/content.asp?sectionid=92&ElementID=98

Physical Activity Program Checklist

www.healthyagingprograms.org/content.asp?sectionid=73&ElementID=334

National Blueprint

www.agingblueprint.org

CDC's Division of Nutrition and Physical Activity

www.cdc.gov/nccdphp/dnpa/index.htm

Older Adult Perspectives on Physical Activity and Exercise: Voices From Multiple Cultures

www.healthyagingprograms.org/content.asp?sectionid=73&ElementID=339

FALL PREVENTION

NCOA's Center for Healthy Aging—Fall Prevention Home Page

www.healthyagingprograms.org/content.asp?sectionid=69

National Action Plan

www.healthyagingprograms.org/content.asp?sectionid=69&ElementID=220

Fall Prevention Programs Checklist

www.healthyagingprograms.org/content.asp?sectionid=69&ElementID=335

CDC's Fact Sheet—Falls and Hip Fractures

www.cdc.gov/ncipc/factsheets/falls.htm

NUTRITION

NCOA's Center for Healthy Aging—Nutrition Home Page

www.healthyagingprograms.org/content.asp?sectionid=72

MEDICATION MANAGEMENT

NCOA's Center for Healthy Aging—Medication Management Home Page

www.healthyagingprograms.org/content.asp?sectionid=70

MENTAL HEALTH/SUBSTANCE ABUSE

NCOA's Center for Healthy Aging—Mental Health Home Page

www.healthyagingprograms.org/content.asp?sectionid=71

Substance Abuse and Mental Health Services Administration

www.mentalhealth.samhsa.gov

Acknowledgments

NCOA would like to thank the authors who contributed to this issue brief: Mary Altpeter, PhD, and Ellen Schneider, MBA, of the UNC Institute on Aging; Lucinda Bryant, PhD, of the University of Colorado at Denver, Health Sciences Center; and Nancy Whitelaw, PhD, and Lynn Beattie, MPT, MHA, of NCOA's Center for Healthy Aging.

Initially released in Winter, 2004, this Issue Brief was revised in the Spring, 2006 to highlight evidence-based health promotion programs available for implementation across the aging services network.

This issue brief, along with the Center for Healthy Aging's other publications, is available at www.healthyagingprograms.org/content.asp?sectionid=92

National Council on Aging

300 D St., S.W. Suite #801
Washington, D.C. 20024
Phone (202) 479-1200